

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph on page 8 of the Specification beginning with "Figure 6 is..." as follows:

Figure ~~6~~ 5 is a series of graphs illustrating the relationship between the transparency of the code strip, the current to the light source, and the clarity of the electrical signal generated by the optical encoder. The following equations are utilized:

$$c = f(r, b) \text{ and } b = f(a)$$

where c is the clarity of the signal, r is the transparency of the code strip, b is the brightness of the light source, and a is the current to the light source.

¶In Figure ~~6~~ 5, the time line of operation is shown ~~(610)~~ (510), with the zero being the point of initial operation of the device in which the optical encoder is installed, in this example a printer. The next line ~~(620)~~ (520) shows the operation of the wiper, which is on a regular, predetermined schedule. It is possible that the operation of the wiper could be coordinated with the circuitry of the present invention, thus operating only as needed. The next graph ~~(630)~~ (530) shows the transparency of the code strip over time. At zero time, transparency is at 1, i.e. it is sufficient. As contaminants deposit on the code strip, the transparency decreases. Although it increases every time the wiper operates, due to imperfections in the performance of the wiper, transparency generally decreases down to 0, i.e. insufficient. When the transparency of the code strip reaches 0, the clarity of the signal also approaches 0, as shown in graph ~~650~~ 550. If the clarity of the signal were to reach 0, the signal would be distorted. Before the signal is distorted, the current to the light source is increased, as shown in graph ~~640~~ 540, thereby restoring the transparency of the code strip back up to 1 ~~(630)~~ (530) and the clarity of the signal back up to 1 ~~(650)~~ (550). The integrity of the signal is maintained by monitoring the transparency of the code strip and adjusting the current to the light source when the transparency of decreases below a certain threshold, represented by the 1-line on graph ~~630~~ 530.